07701413

Char-Broil®

CB600X™

Propane Vertical Smoker

Product Manual
Model 07701413

FOR OUTDOOR USE ONLY

CAUTION

Read and follow all safety statements, assembly instructions, and use and care directions before attempting to assemble and cook.

INSTALLER/ASSEMBLER:

Leave this manual with consumer.

CONSUMER:

Keep this manual for future reference.

WARNING

Failure to follow all manufacturer's instructions could result in serious personal injury and/or property damage.

CAUTION

Some parts may contain sharp edges – especially as noted in the manual! Wear protective gloves if necessary.

CAUTION

THIS UNIT IS HEAVY!
DO NOT assemble without a helper.

If you have questions or need assistance during assembly, please call 1-800-241-7548.
To insure your satisfaction and for follow-up service, **register your Cb600x™ online at www.grillregistration.com**

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DANGER

If you smell gas:

1. **Shut off gas to the appliance.**
2. **Extinguish any open flame.**
3. **Open lid.**
4. **If odor continues, keep away from the appliance and immediately call your fire department.**

Failure to follow these instructions could result in fire or explosion, which could cause property damage, personal injury or death.

DANGER

1. **Never operate this appliance unattended.**
2. **Never operate this appliance within 10ft (3m) of any structure, combustible material or other gas cylinder.**
3. **Never operate this appliance within 25 ft (7.5 m) of any flammable liquid.**
4. **If a fire should occur, keep away from the appliance and immediately call your fire department, Do not attempt to extinguish an oil or grease fire with water.**

Failure to follow these instructions could result in fire, explosion or burn hazard, which could cause property damage, personal injury or death.

WARNING

CALIFORNIA PROPOSITION 65

1. Combustion by-products produced when using this product contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

2. This product contains chemicals, including lead and lead compounds, known to the State of California to cause cancer, birth defects or other reproductive harm.
   Wash your hands after handling this product.

Installation Safety Precautions

- Use your CB600x™, as purchased, only with LP (propane) gas and the regulator/valve assembly supplied.
- Your CB600x™ installation must conform with local codes, or in their absence of local codes, with either the *National Fuel Gas Code, ANSI Z223.1/ NFPA 54, Natural Gas and Propane Installation Code, CSA B149.1, and Propane Storage and Handling, CSA B149.2, Canadian Electrical Code, CSA C22.1 or the Standard for Recreational Vehicles, ANSI*
  A 119.2/NFPA 1192, and CSA Z240 RV Series, Recreational Vehicle Code, as applicable.
- Your CB600x™ is not for use in or on recreational vehicles and/or boats.
- This CB600x™ is safety certified for use in the United States and/or Canada only. Do not modify for use in any other location. Modification will result in a safety hazard.

Safety Symbols

The symbols and boxes shown below explain what each heading means. Read and follow all of the messages found throughout the manual.

DANGER

DANGER: Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING: Indicates an potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION: Indicates a potentially hazardous situation or unsafe practice which, if not avoided, may result in minor or moderate injury.

CAUTION

For residential use only. Do not use for commercial cooking.

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Call Grill Service Center for Help and Parts

- If you need assistance with your product or warranty parts call **1-800-241-7548. Hours of Service Center Operation are 8:00 A.M. To 6:00 P.M. EST Monday - Friday.**

- To order non-warranty replacement parts or accessories please visit us on the web at www.charbroil.com or call 1-800-241-7548 and one of our friendly and knowledgeable agents will be glad to assist you.

IMPORTANT: Fill out the product record information below.

Model Number _____

Serial Number _____
See rating label on grill for serial number.

Date Purchased _____

To insure your satisfaction and for follow-up service, register your CB600x™ online at: www.grillregistration.com

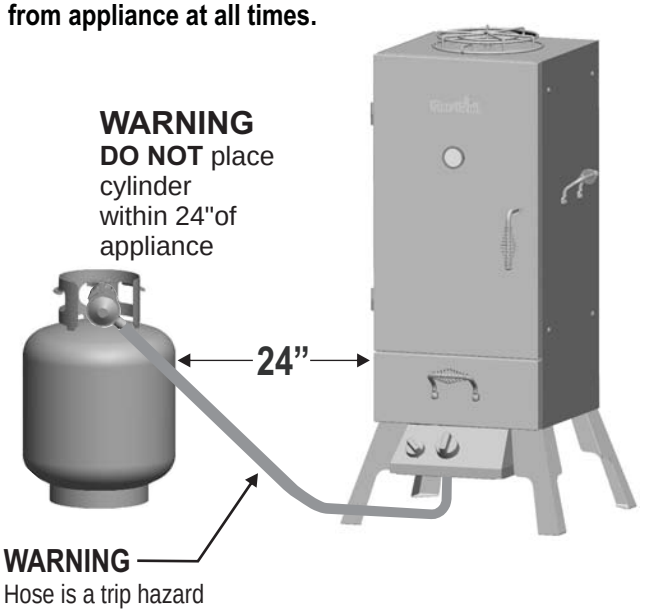
WARNING

Do not attempt to repair or alter the hose/valve/regulator for any "assumed" defect. Any modification to this assembly will void your warranty and create the risk of a gas leak and fire. Use only authorized replacement parts supplied by manufacturer.

USE AND CARE

DANGER

- **NEVER store a spare LP cylinder under or near the appliance or in an enclosed area.**
- **Never fill a cylinder beyond 80% full.**
- **An over filled or improperly stored cylinder is a hazard due to possible gas release from the safety relief valve. This could cause an intense fire with risk of property damage, serious injury or death.**
- **If you see, smell or hear gas escaping, immediately get away from the LP cylinder/appliance and call your fire department.**
- **Keep LP tank at a minimum distance of 24" (inches) away from appliance at all times.**

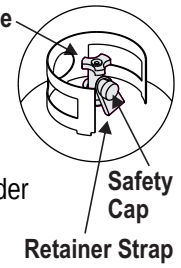


LP Cylinder Removal, Transport and Storage

- Turn OFF control knob and LP cylinder valve. Turn coupling nut counterclockwise by hand only - do not use tools to disconnect. Install safety cap onto LP cylinder valve. Always use cap and strap supplied with valve. **Failure to use safety cap as directed may result in serious personal injury and/or property damage.**

LP (Liquefied Petroleum Gas)

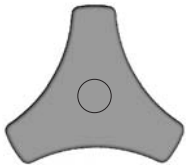
- LP gas is nontoxic, odorless and colorless when produced. **For Your Safety**, LP gas has been given an odor (similar to rotten cabbage) so that it can be smelled.
- LP gas is highly flammable and may ignite unexpectedly when mixed with air.
- A disconnected LP cylinder in storage or being transported must have a safety cap installed (as shown). Do not store an LP cylinder in enclosed spaces such as a carport, garage, porch, covered patio or other building. Never leave an LP cylinder inside a vehicle which may become overheated by the sun.



- Do not store an LP cylinder in an area where children play.

LP Cylinder

- **The LP cylinder used with your appliance must meet the following requirements:**
- Use LP cylinders only with these required measurements: 12" (30.5cm) (diameter) x 18" (45.7 cm) (tall) with 20 lb. (9 kg.) capacity maximum.
- LP cylinders must be constructed and marked in accordance with specifications for LP cylinders of the U.S. Department of Transportation (DOT) or the National Standard of Canada, CAN/CSA-339, Cylinders, Spheres and Tubes for Transportation of Dangerous Goods; and commission, as applicable. See LP cylinder collar for marking.
- LP cylinder valve must have:
  - Type 1 outlet compatible with regulator or Oil-Less Turkey Fryer.
  - Safety relief valve.
  - UL listed Overfill Protection Device (OPD). This OPD safety feature is identified by a unique triangular hand wheel. **Use only LP cylinders equipped with this type of valve.**


OPD Hand Wheel

- LP cylinder must be arranged for vapor withdrawal and include collar to protect LP cylinder valve. Always keep LP cylinders in upright position during use, transit or storage.

LP Cylinder Filling

- Use only licensed and experienced dealers.
- LP dealer **must purge new cylinder** before filling.
- Dealer should **NEVER** fill LP cylinder more than 80% of LP cylinder volume. Volume of propane in cylinder will vary by temperature.
- A frosty regulator indicates gas overfill. Immediately close LP cylinder valve and call local LP gas dealer for assistance.
- Do not release liquid propane (LP) gas into the atmosphere. This is a hazardous practice.
- To remove gas from LP cylinder, contact an LP dealer or call a local fire department for assistance. Check the telephone directory under “Gas Companies” for nearest certified LP dealers.

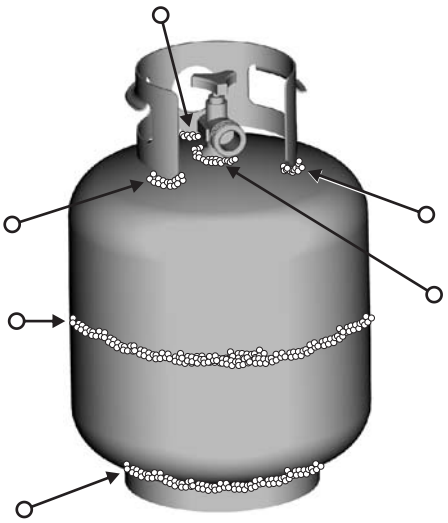
LP Cylinder Exchange

- Many retailers that sell the CB600x™ offer you the option of replacing your empty LP cylinder through an exchange service. Use only those reputable exchange companies that inspect, precision fill, test and certify their cylinders. **Exchange your cylinder only for an OPD safety feature-equipped cylinder as described in the "LP Cylinder" section of this manual.**
- Always keep new and exchanged LP cylinders in upright position during use, transit or storage.
- **Leak test new and exchanged LP cylinders BEFORE connecting to grill.**

LP Cylinder Leak Test

For your safety

- Leak test must be repeated each time LP cylinder is exchanged or refilled.
- Do not smoke during leak test.
- Do not use an open flame to check for gas leaks.
- Appliance must be leak tested outdoors in a well-ventilated area, away from ignition sources such as gas fired or electrical appliances. During leak test, keep appliance away from open flames or sparks.
- Use a clean paintbrush and a 50/50 mild soap and water solution. Brush soapy solution onto areas indicated by arrows in figure below.
- **Do not use household cleaning agents.** Damage to gas train components can result.

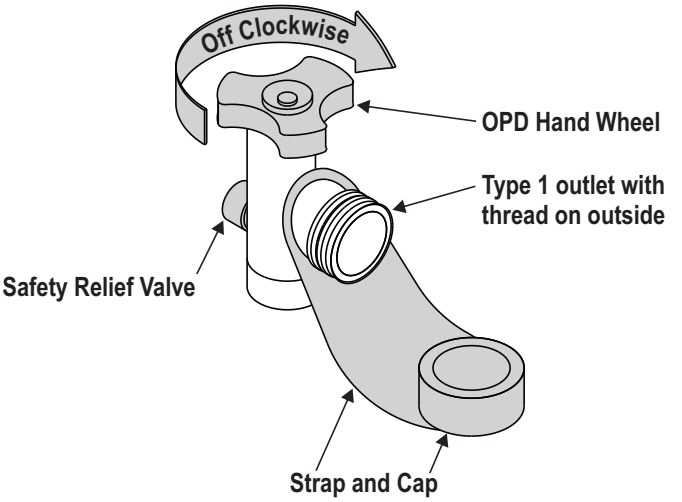


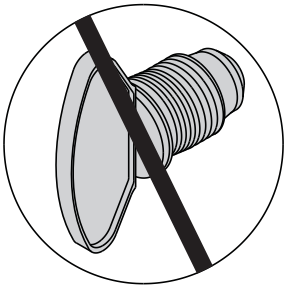
WARNING

If “growing” bubbles appear do not use or move the LP cylinder. Contact an LP gas supplier or your fire department!

Connecting Regulator to the LP Cylinder

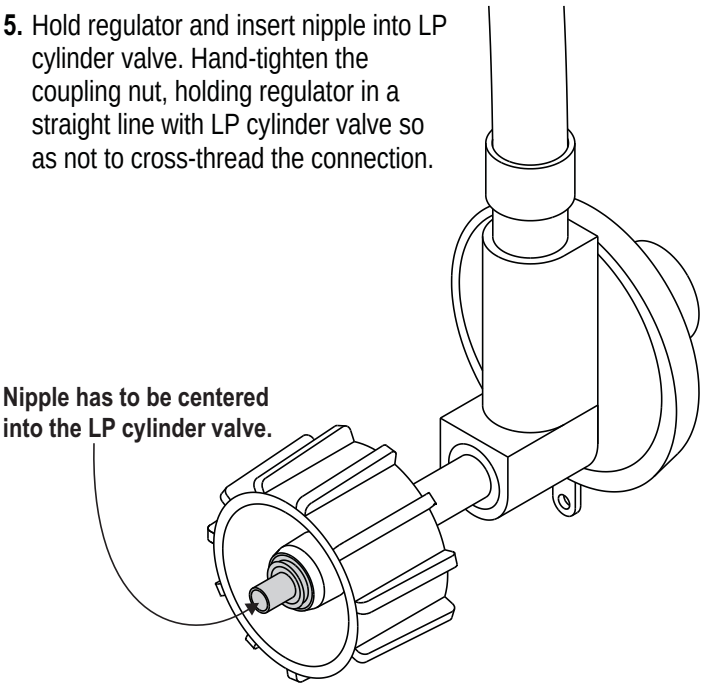
1. LP cylinder must be properly secured onto appliance. (Refer to assembly section.)
2. Turn all control knobs to the OFF position.
3. Turn LP cylinder OFF by turning hand-wheel clockwise to a **full stop**.
4. Remove the protective cap from LP cylinder valve. Always use cap and strap supplied with valve.

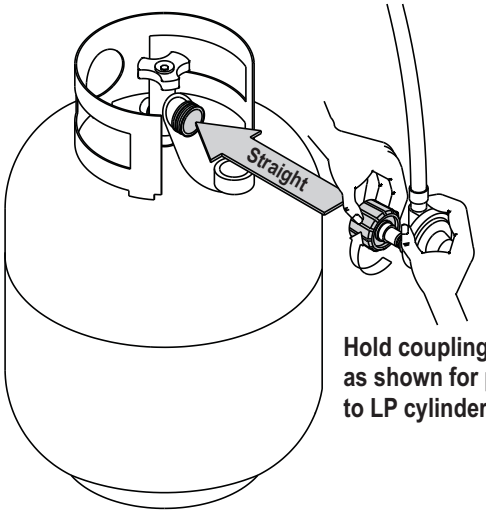




Do not use a POL transport plug (plastic part with external threads)! It will defeat the safety feature of the valve.

5. Hold regulator and insert nipple into LP cylinder valve. Hand-tighten the coupling nut, holding regulator in a straight line with LP cylinder valve so as not to cross-thread the connection.





Hold coupling nut and regulator as shown for proper connection to LP cylinder valve.

6. Turn the coupling nut clockwise and tighten to a full stop. The regulator will seal on the back-check feature in the LP cylinder valve, resulting in some resistance. **An additional one-half to three-quarters turn is required to complete the connection. Tighten by hand only – do not use tools.**

NOTE:

If you cannot complete the connection, disconnect regulator and repeat steps 5 and 6. If you are still unable to complete the connection, **do not use this regulator!**

DANGER

- Do not insert any tool or foreign object into the valve outlet or safety relief valve. You may damage the valve and cause a leak. Leaking propane may result in explosion, fire, severe personal injury, or death.

WARNING

- This appliance is not intended to be installed in or on a boat.
- This appliance is not intended to be installed in or on an RV.
- Never attempt to attach this appliance to the self-contained LP gas system of a camper trailer or motor home.
- Do not use appliance until leak-tested.
- If a leak is detected at any time, STOP and call the fire department.
- If you cannot stop a gas leak, *immediately* close LP cylinder valve and call LP gas supplier or your fire department!

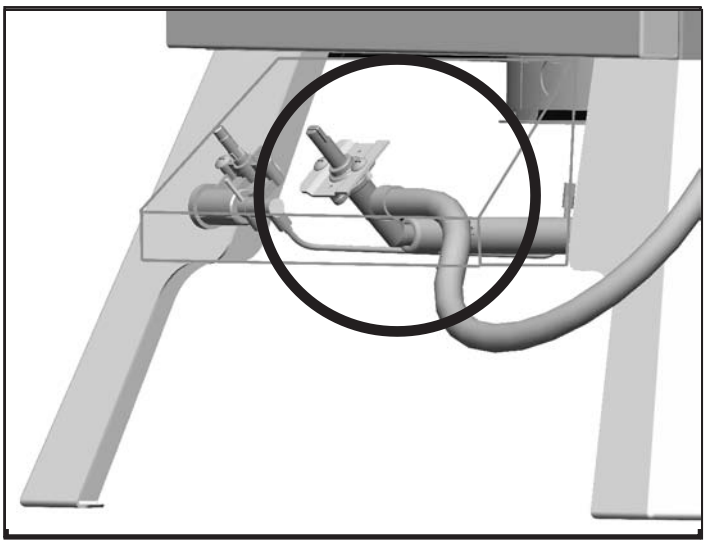
Leak Testing Valves, Hose and Regulator

1. Turn control knob to OFF.

2. Be sure regulator is tightly connected to LP cylinder.

3. Completely open LP cylinder valve by turning hand wheel counterclockwise. If you hear a *rushing sound*, turn gas off immediately. There is a major leak at the connection. **Correct before proceeding**.

4. Brush soapy solution onto areas circled below.



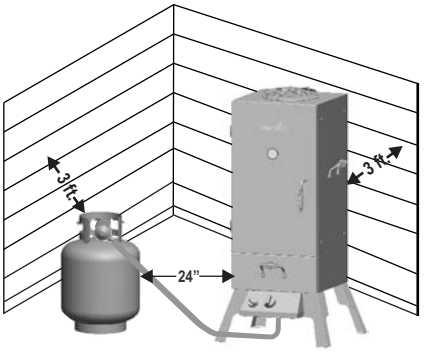
5. If "growing" bubbles appear, there is a leak. Close LP cylinder valve immediately and retighten connections. **If leaks cannot be stopped do not try to repair.** Call for replacement parts. Order new parts by giving the serial, model number and name and part number of items needed (see parts list) to the Grill Service Center at 1-800-241-7548.

6. Always close LP cylinder valve after performing leak test by turning hand wheel clockwise.

WARNING

For Safe Use of Your CB600x™ and to Avoid Serious Injury:

- The use of alcohol, prescription or non-prescription drugs may impair the consumer's ability to properly assemble or safely operate the appliance.
- When cooking, the appliance must be on a level, stable noncombustible surface in an area clear of combustible material. An asphalt surface (blacktop) may not be acceptable for this purpose.
- Do not leave appliance unattended. Keep children and pets away from the appliance at all times.
- Do not place empty cooking vessel on the appliance while in operation. Use caution when placing anything in cooking vessel while the appliance is in operation.
- Do not move the appliance when in use. Allow the cooking vessel to cool to 115°F (45°C) before moving or storing.
- This appliance is not intended for and should never be used as a heater.
- This appliance will be hot during and after use. Use insulated oven mitts or gloves and long-handled barbecue utensils for protection from hot surfaces or splatter from cooking liquids.
- Keep appliance area clear and free from materials that burn.
- Keep appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
- Keep fuel supply hose away from any heated surfaces.
- Use appliance only in well-ventilated space. NEVER use in enclosed space such as carport, garage, porch, covered patio, or under an overhead structure of any kind.
- **Use appliance at least 3 ft. from any wall or surface.** Maintain 10 ft. clearance to objects that can catch fire or sources of ignition such as pilot lights on water heaters, live electrical appliances, etc.



- **Apartment Dwellers:**

  Check with management to learn the requirements and fire codes for using an LP gas appliance in your apartment complex. If allowed, use outside on the ground floor with a three (3) foot clearance from walls or rails. Do not use on or under balconies.
- **NEVER attempt to light burner with *any type of closed cover* . A buildup of non-ignited gas inside a closed appliance is hazardous.**
- **Never operate appliance with LP cylinder out of correct position specified in assembly instructions.**
- **Always close LP cylinder valve and remove coupling nut before moving LP cylinder from specified operation position.**

Safety Tips

- Before opening LP cylinder valve, check the coupling nut for tightness.
- When appliance is not in use, turn off control knob and LP cylinder valve.
- Smoker Chamber door should be **open** while attempting to light the burner.
- The grease tray **must** be inserted into appliance and emptied after each use. Do not remove grease tray until appliance has completely cooled.
- If you notice grease or other hot material dripping from appliance onto valve, hose or regulator, turn off gas supply at once. Determine the cause, correct it, then clean and inspect valve, hose and regulator before continuing. Perform a leak test.
- Do not store objects or materials under the appliance enclosure that would block the flow of combustion air to the underside of either the control panel or the firebox bowl.
- The regulator may make a humming or whistling noise during operation. This will not affect safety or use of grill.
- If you have an appliance problem see the *"Troubleshooting Section"*.
- If the regulator frosts, turn off appliance and LP cylinder valve immediately. This indicates a problem with the cylinder and it should not be used on any product. Return to supplier!

CAUTION

- **Putting out grease fires by closing the lid is not possible. This appliance is well ventilated for safety reasons.**
- **Do not use water on a grease fire. Personal injury may result. If a grease fire develops, turn knobs and LP cylinder off.**
- **Do not leave appliance unattended while burning off food residue. If appliance has not been regularly cleaned, a grease fire can occur that may damage the product.**

Ignitor Lighting

- **Do not lean over appliance while lighting.**

1. Turn ON LP gas cylinder.

2. Open the Smoke Chamber door.

3. Press and turn the control knob to HIGH.

4. Turn ROTARY IGNITOR knob rapidly.

5. Pull out the Firebox Drawer to verify that the burner is lit.

6. If ignition does not occur in 5 seconds, turn the burner control knob OFF, wait 5 minutes, and repeat lighting procedure.

If ignition still does not occur, follow match-lighting instructions.

WARNING

Turn control knob and LP cylinder OFF when not in use.

CAUTION

If ignition does NOT occur in 5 seconds, turn the control knob OFF, wait 5 minutes and repeat the lighting procedure. If the burner does not ignite with the valve open, gas will continue to flow out of the burner and could accidently ignite with risk of injury.

Match-Lighting

Do not lean over appliance while lighting.

1. Turn ON LP cylinder.

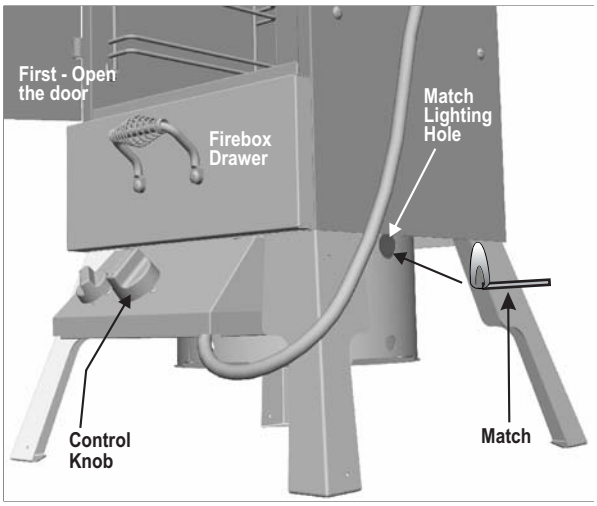
2. Open the Smoke Chamber door.

3. Place lit match into match lighting hole of appliance as pictured below. Make sure lit match is placed inside hole and near burner.

4. Push in and turn control knob to HIGH.

Be sure burner lights and stays lit.

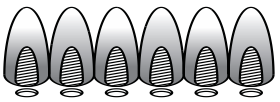
5. Pull out the Firebox Drawer to verify that the burner is lit.



View is from side of appliance

Burner Flame Check

- Light burner, rotate knob from **HIGH** to **LOW**. Looking through the match light holes underneath the appliance, you should see the flame height decrease when turning knob from **HIGH** to **LOW**. Always check flame prior to each use. If only low flame is seen refer to "Sudden drop or low flame" in the *Troubleshooting Section*.



Turning Appliance Off

- Turn control knob to **OFF** position. Turn LP cylinder off by turning hand-wheel clockwise to a full stop.

Ignitor Check

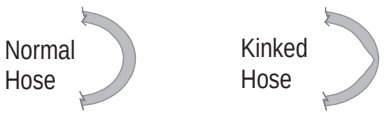
- **Turn gas off at LP cylinder.** Turn ignitor knob. "Click" should be heard each time at electrode. See *"Troubleshooting"* if no click or spark.

Valve Check

- **Important: Make sure gas is off at LP cylinder before checking valve**. Knob locks in **OFF** position. To check valve, first push in knob and release, knob should spring back. If knob does not spring back, replace valve assembly before using Oil-less Fryer. Turn knob to **HIGH** position then turn back to **OFF** position. Valve should turn smoothly.

Hose Check

- Before each use, check to see if hose is cut, worn or kinked. Replace damaged hose before using applaince. **Use only valve/hose/regulator specified by manufacturer.**

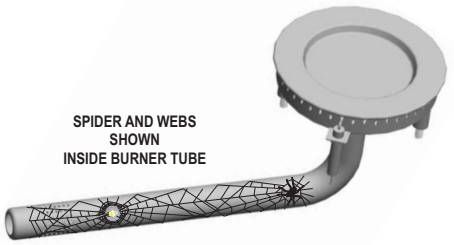


General Appliance Cleaning

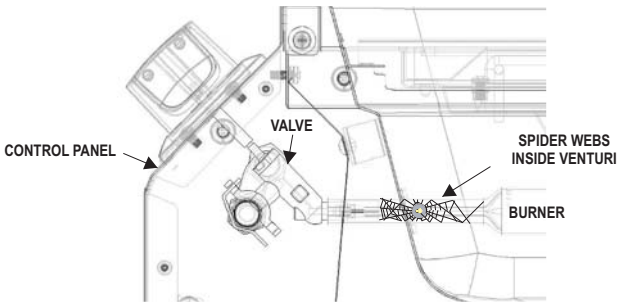
- Do not mistake brown or black accumulation of grease and smoke for paint. Interiors are not painted at the factory **(and should never be painted)**. Apply a strong solution of detergent and water or use a grill cleaner with scrub brush on insides of appliance lid and bottom. Rinse and allow to completely air dry. **Do not apply a caustic grill/oven cleaner to painted surfaces.**
- **Plastic parts:** Wash with warm soapy water and wipe dry. Do not use citrisol, abrasive cleaners, degreasers or a concentrated grill cleaner on plastic parts. Damage to and failure of parts can result.
- **Painted surfaces:** Wash with mild detergent or non-abrasive cleaner and warm soapy water. Wipe dry with a soft non-abrasive cloth.
- **Stainless steel surfaces:** To maintain the high quality appearance, wash with mild detergent and warm soapy water and wipe dry with a soft cloth after each use. Baked-on grease deposits may require the use of an abrasive plastic cleaning pad. Use only in direction of brushed finish to avoid damage. Do not use abrasive pad on areas with graphics.

CAUTION

SPIDER ALERT!



If you notice that your grill is getting hard to light or that the flame isn't as strong as it should be, take the time to check and clean the venturi.



In some areas of the country, spiders or small insects have been known to create "flashback" problems. The spiders spin webs, build nests and lay eggs in the grill's venturi tube(s) obstructing the flow of gas to the burner. The backed-up gas can ignite in the venturi behind the control panel. This is known as a flashback and it can damage your grill and even cause injury.

To prevent flashbacks and ensure good performance the burner and venturi assembly should be removed from the grill and cleaned before use whenever the grill has been idle for an extended period.

Cleaning the Burner Assembly

Follow these instructions to clean and/or replace parts of burner assembly or if you have trouble igniting appliance.

1. **Turn gas off at control knob and LP cylinder and disengage regulator from cylinder.**
2. Remove the smoker drawer and water pan, shown **A**.
3. Remove the Electrode Wire from the Rotary Ignitor, shown **B**.
4. Remove 4 Control Panel screws and nuts. Shown **C**
5. Disengage Control Panel/control Valve from burner..
6. Slide Control Panel Assembly from unit, shown **D**.

Cleaning the Burner Assembly (Continued)

7. Clean inner burner as recommended below, shown **E**.

We suggest three ways to clean the burner tube. Use the one easiest for you.

(A) Bend a stiff wire (a light weight coat hanger works well) into a small hook. Run hook through burner tube several times.

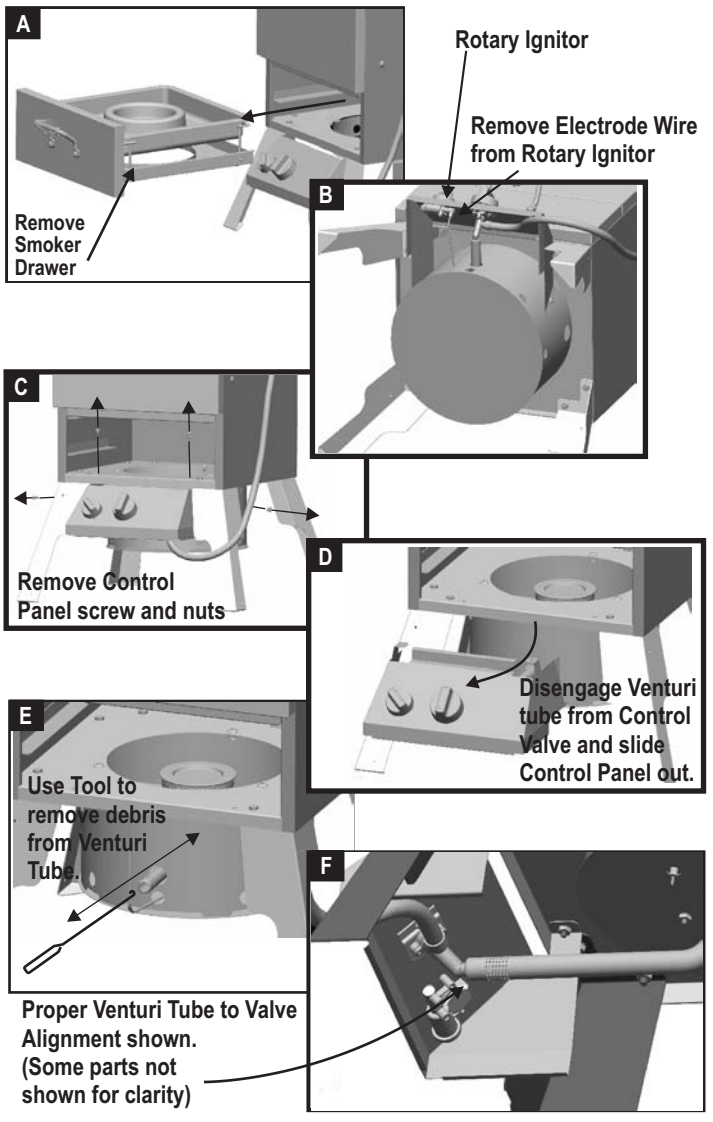
(B) Use a narrow bottle brush with a flexible handle (do not use a brass wire brush), run the brush through burner tube several times.

(C) **Wear eye protection:** Use an air hose to force air into the burner tube and out the burner ports. Check each port to make sure air comes out each hole.

8. Check burner for damage, due to normal wear and corrosion some holes may become enlarged. If any large cracks or holes are found replace burner.
9. Attach electrode to burner.
10. Carefully replace control panel assembly .

VERY IMPORTANT: Burner tube must re-engage over valve opening. See illustration, shown F.

11. Reverse steps for re-assembly.



Food Safety

Food safety is a very important part of enjoying the outdoor cooking experience. To keep food safe from harmful bacteria, follow these four basic steps:

Clean: Wash hands, utensils, and surfaces with hot soapy water before and after handling raw meat and poultry.

Separate: Separate raw meats and poultry from ready-to-eat foods to avoid cross contamination. Use a clean platter and utensils when removing cooked foods.

Cook: Cook meat and poultry thoroughly to kill bacteria. Use a thermometer to ensure proper internal food temperatures.

Chill: Refrigerate prepared foods and leftovers promptly.

For more information call: USDA Meat and Poultry Hotline at 1-800-535-4555 In Washington, DC (202) 720-3333, 10:00 am-4:00 pm EST.

How To Tell If Meat Is Cooked Thoroughly

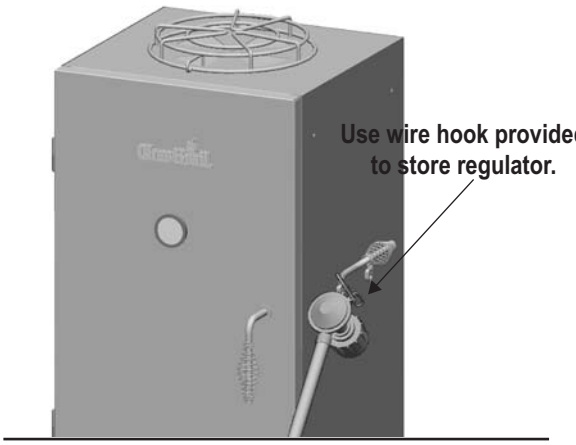
- Meat and poultry cooked on the appliance often browns very fast on the outside. Use only thawed meat and a meat thermometer to be sure food has reached a safe internal temperature, and cut into food to check for visual signs of doneness.
- We recommend food to be at least 40°F before cooking in your appliance.
- Whole poultry should reach 165° F. Juices should run clear and flesh should not be pink.
- Beef, veal and lamb steaks, roasts and pork chops can be cooked to 160° F.
- NEVER partially cook meat or poultry and finish cooking later. Cook food completely to destroy harmful bacteria.

Water Level

- Watch water level. Always keep water in water pan (unless you wish to brown your food), Food can burn quickly if water completely evaporates. When using smoker, be very careful when adding water to the hot smoker.

Storing Your Appliance

- Clean cooking basket.
- Store in dry location.
- When LP cylinder is connected to appliance, store outdoors in a well-ventilated space and out of reach of children.
- If Regulator is disconnected from the LP cylinder, a hook is provided to hang Regulator from the handle as shown.



- Cover appliance if stored outdoors. Choose from a variety of covers offered by manufacturer.
- Store indoors ONLY if LP cylinder is turned off and disconnected, removed from appliance and stored outdoors.
- When removing appliance from storage, follow "*Cleaning the Burner Assembly*" instructions before starting.

Safety Precautions while cooking:

- The exterior surfaces of your CB600x™ can become extremely hot during use. Be sure to wear insulated oven mitts or gloves before making adjustments to the Top Damper or when opening the Smoker door.

Cooking Chart

Food	Weight or Quantity	Water Pan	Description When Done or Temperature	Cooking Time
Fish	2 lbs.	4 quarts	Flakes with fork	1 to 2 hours
Shrimp	2 lbs.	4 quarts	Until pink	1 to 2 hours
Roast	3 lbs.	4 quarts	140° rare / 170° well done	2 to 4 hours
Chicken	4 whole	4 quarts	180°	3 to 4 hours
Pork Ribs	3 racks	4 quarts	170°	3 to 4 hours
Smoked Ham	10 lbs.	4 quarts *	140°	3 to 6 hours
Ham (fresh)	16 lbs.	4 quarts *	180°	7 to 8 hours
Boston Butt	5 lbs.	4 quarts *	170°	4 to 5 hours
Turkey	21 lbs.	4 quarts *	180°	5 to 8 hours

* May require more than 4 quarts of water. Check smoker during smoking process to make sure all water does not evaporate. All cooking times are approximate.

<u>Tools Required for Assembly:</u>

#2 Phillips or Standard Flat blade Screwdriver (Not Provided)

Small Adjustable Wrench (Not Provided)

7/16" Combination Wrench (Not Provided)

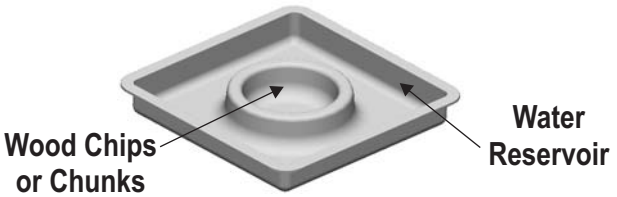
Time Required for Assembly:

45 minutes to 1 hour

Setup Instructions

Using Wood Chips or Chunks

- Dried aromatic wood chips or chunks need to be saturated with water, so that when placed in the water pan, a smoldering smoke will result. Wood chips or chunks can be soaked too long; however, 2 hours is adequate. As a rule of thumb, use wood chunks for smoking 3 or more hours and wood chips when smoking less than 3 hours. Start with 3 wood chunks or 1½ cups of wood chips.



Spray inside door and body with nonstick vegetable oil based spray. Place water pan onto brackets in the smoker drawer. Using a 4 quart (one gallon) container fill the water pan 2/3 full with hot tap water. Do not overfill the water pan.

Water or Juice?

Placing water alone in the water pan is adequate; however, it is not the only viable choice. Fruit juice, cola, beer, wine, drained marinades and even the water in which the wood has soaked make flavorful sources. In addition, celery stalks, onions, carrots, apples, peppercorns and bay leaves are just a few of the other popular flavor sources to add to the water pan.

Before each use, inspect the interior lid and body surface areas for loose particle buildup. Clean away any loose or flaking residue so it will not fall onto food while being cooked.

Before cooking, coat cooking grates with oil or with a vegetable oil based spray. Using oven mitts, carefully place cooking grates into smoker. Larger cuts of meat or food that cook for long periods of time should be placed on the lower cooking grate. If you are cooking foods with several pieces, such as racks of ribs or Cornish hens, be sure to allow adequate spacing for even heat circulation. Using oven mitts, carefully insert upper cooking grate into smoker. Smaller food items require less cooking time and should be placed on the upper cooking grate. After filling the smoker, close the door and leave undisturbed until suggested minimum cooking time.

Meats that require more than 4 hours of cooking time to reach doneness may require additional water. The initial amount of hot water added (4 quarts) should last 4-6 hours. After 4-6 hours, check water level and add more hot water as necessary.

Use a meat thermometer for measuring the internal heat of any food. The appearance of smoked foods resembles no other method of cooking, particularly in light colored meats such as pork, turkey, chicken and Cornish hens. The outside will be pinkish-red while the inside when cooked to perfection, is often pink. The juices from fully cooked poultry will run clear when pierced with a fork. Fish is done when it flakes easily when tested with a fork. Shrimp should be resilient to the touch when done. Remove foods from smoker before carving. To brown meats, cook for an additional ½ hour or more with no water in water pan.

Performance of the smoker is dependent on ambient temperature and wind conditions. With temperature below 60°F and winds of 5 MPH or more, the smoker can lose a significant amount of heat and it may not be possible to raise internal temperature of meat high enough to cook it in a reasonable time.

Your smoker is designed with a drawer that is used to hold the water pan. This drawer will allow you to keep a check on the water level in the smoker without having to open the door. Opening the door during cooking will allow heat to escape and will significantly increase cooking time.

You may use your smoker without water in the water pan. However DO NOT use the smoker without the water pan properly installed. To do so will allow grease and drippings from the food being cooked to drop through the unit and onto the floor or surface on which the units sits.

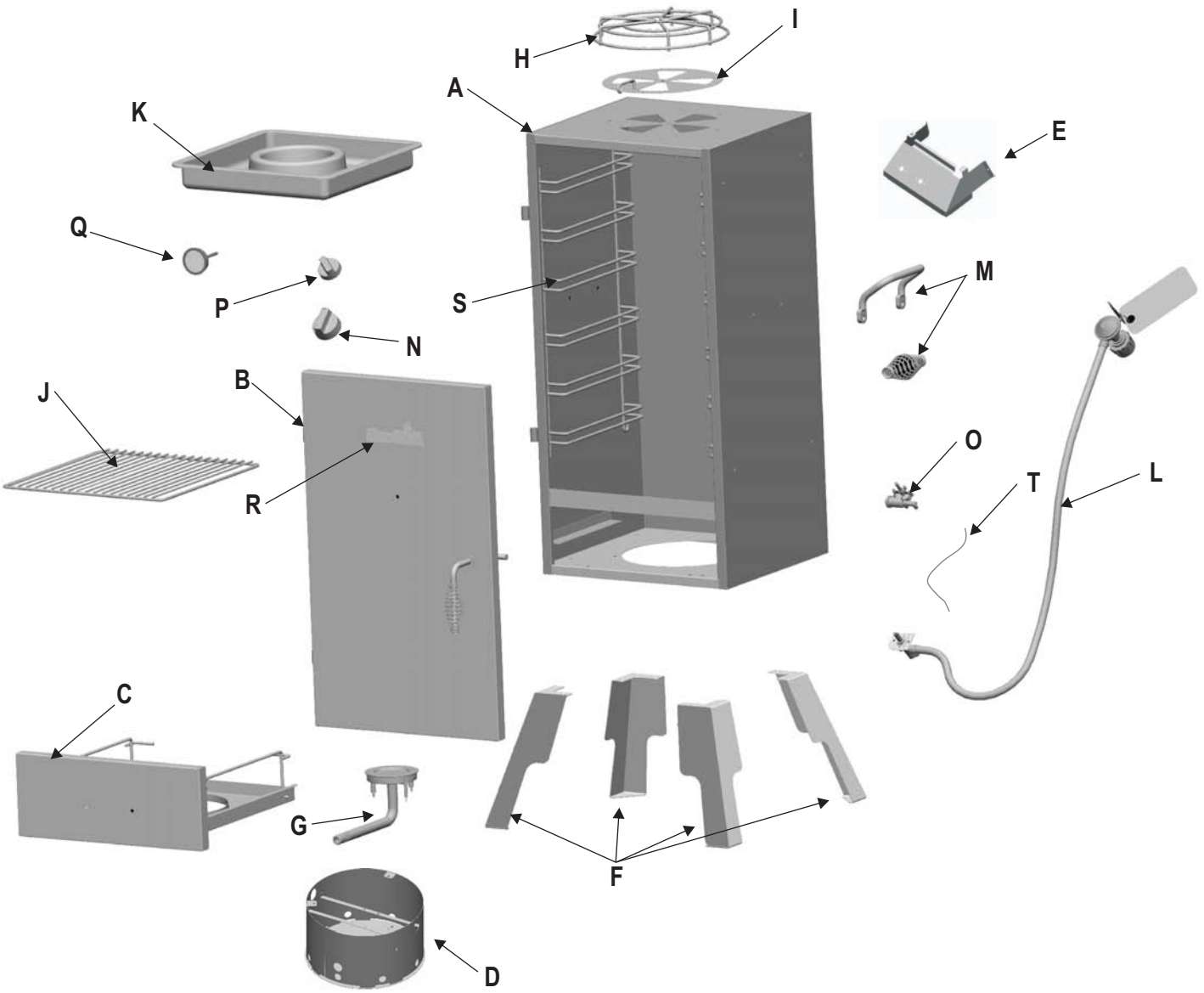
Brush poultry and naturally lean meats with cooking oil, butter or margarine before cooking.

When cooking more than one piece of meat, the cooking time is determined by the largest piece being cooked.

The meat bastes itself during cooking. No basting or turning is necessary while cooking in the smoker. For variety, marinade of barbeque sauce may be applied before placing into the smoker.

Resist the temptation to open the door during cooking time. Opening the door will cause a loss of heat, which will result in longer cooking times.

PARTS DIAGRAM – CB600x™ Model No. 07701413



Key	Qty	Description	Part #
A	1	SMOKER CHAMBER	29101378
B	1	DOOR, SMOKER CHAMBER	29101382
C	1	FIREBOX	29101384
D	1	BURNER HOUSING KIT	55710440
E	1	CONTROL PANEL KIT	55710464
F	4	LEG KIT	55710442
G	1	BURNER KIT	55710443
H	1	TOP GRATE, PORCELAIN	29101390
I	1	DAMPER ASSEMBLY, TOP	55710424
J	3	GRATE, COOKING	29101129
K	1	PAN, WATER	29101133
L	1	HOSE, VALVE, REGULATOR	55710445

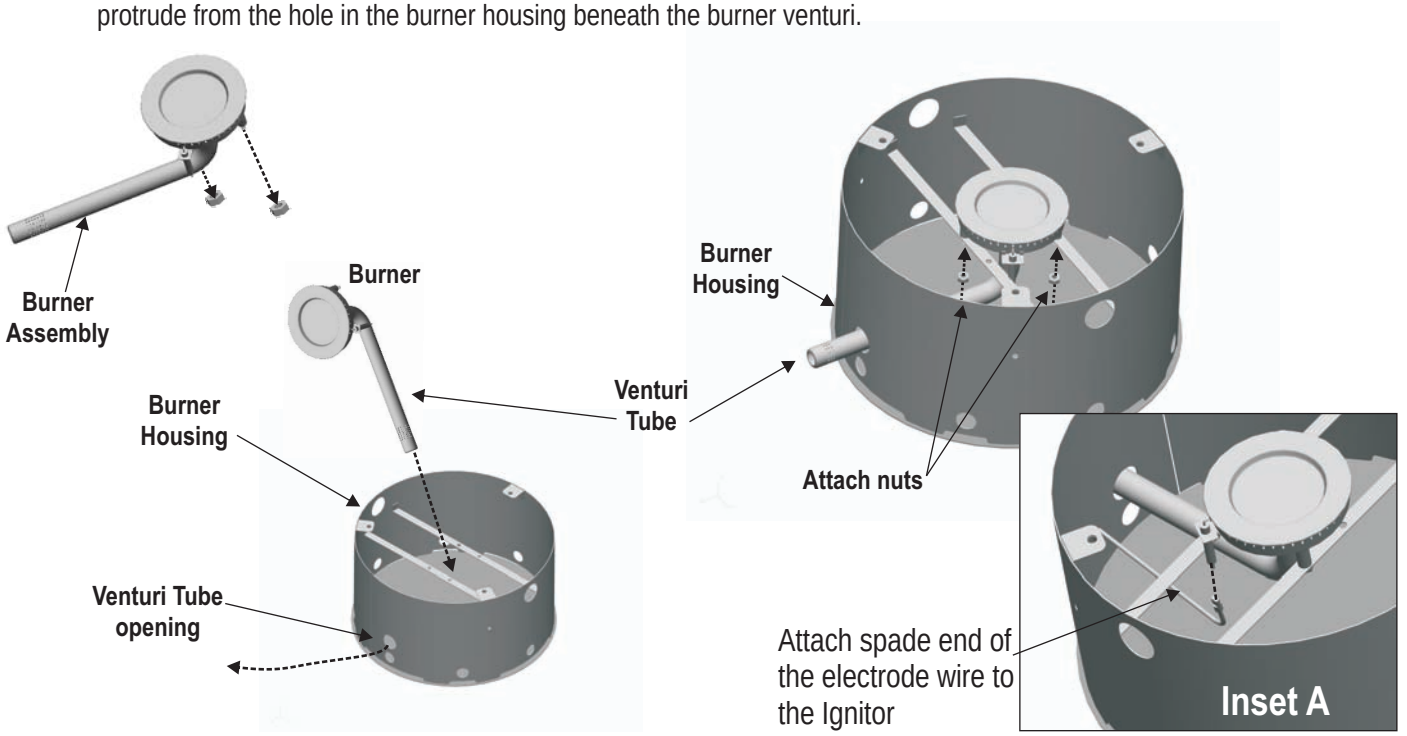
Key	Qty	Description	Part #
M	1	HANDLE KIT	55710430
N	1	KNOB, CONTROL	29000951
O	1	IGNITOR, ROTARY KIT	55710446
P	1	KNOB, IGNITOR	29000950
Q	1	TEMPERATURE GAUGE	29101266
R	1	CHAR-BROIL LOGO PLATE	55710439
S	1	WIRE RACK, SMOKER CHAMBER	55710444
T	1	WIRE, ELECTRODE	29101190
---	1	HARDWARE PACK	42030347
---	1	ASSEMBLY INSTRUCTIONS	42804301
...	1	COOKBOOK	7001155
.			

NOTE: Some grill parts shown in the assembly steps may differ slightly in appearance from those on your particular model. However, the method of assembly remains the same.

ASSEMBLY – Model No. 07701413

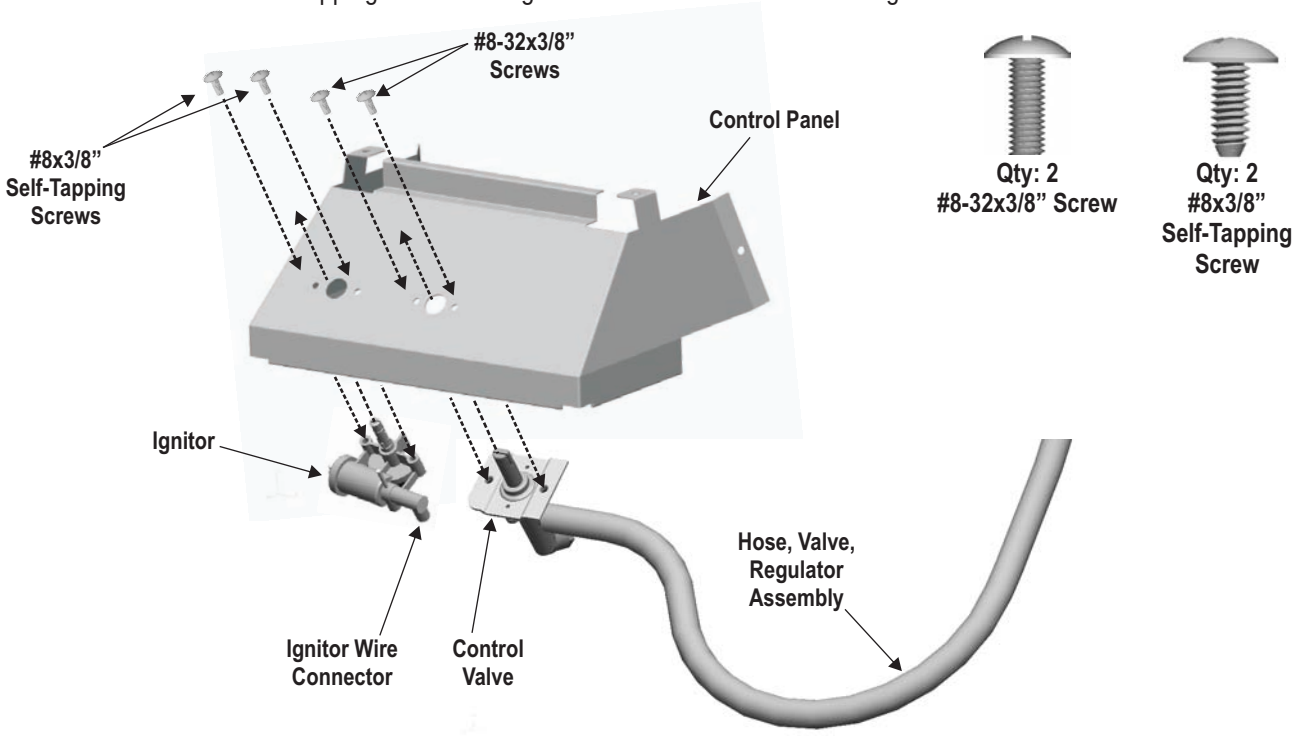
1

- Remove two nuts from the burner assembly.
- Insert burner assembly into burner housing as shown. Insert Venturi Tube through hole in Burner Housing as shown..
- Install the two nuts removed previously to secure the burner assembly to the burner housing.
- Attach the spade end of the electrode wire to the ignitor. Shown **Inset A.** The round end of the electrode wire should protrude from the hole in the burner housing beneath the burner venturi.



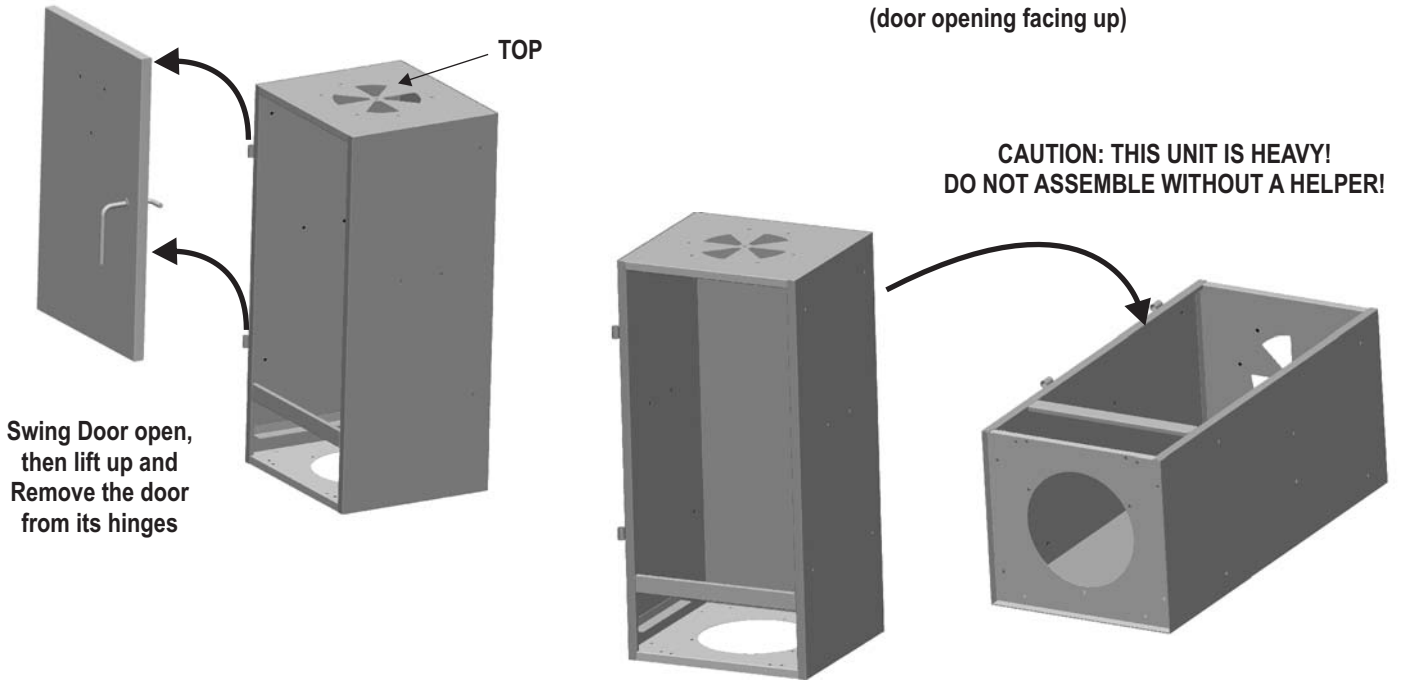
2

- Insert Control Valve into Control Panel as shown. Be sure that the hose enters the control panel from the right side.
- Install two #8-32x3/8" screws through the Control Panel and into the Valve.
- Insert Ignitor into Control Panel as shown. Be sure that the wire connector is pointed towards the right side of the control panel.
- Install two #8x3/8" self-tapping screws through the Control Panel and into the Ignitor.



3

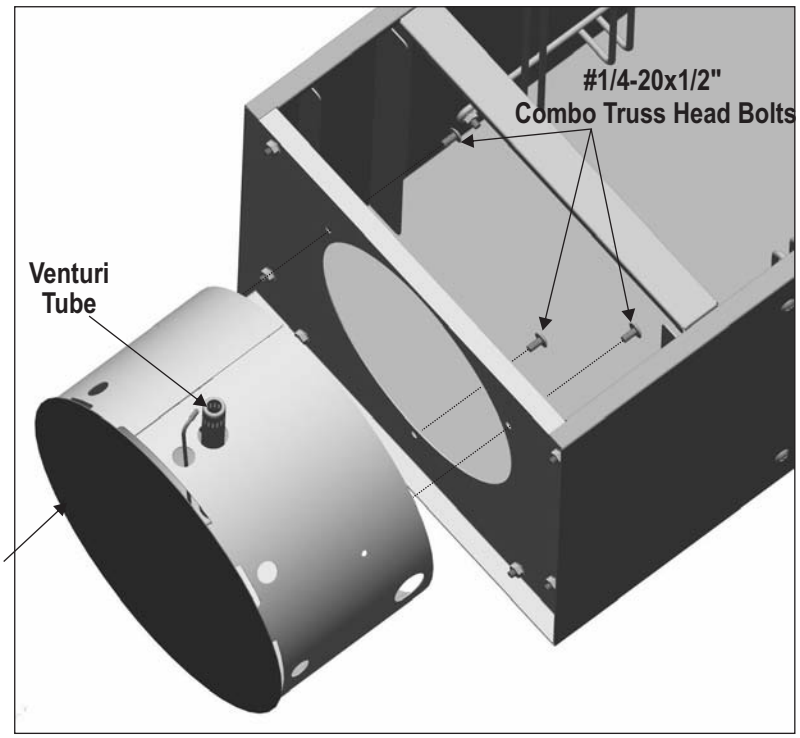
- Carefully remove the door from the unit by swinging it opening and lifting it up and away from the smoker chamber. Lay the door aside.
- Place the Smoker Chamber on it's back with the door opening facing up. **CAUTION: This unit is heavy!**

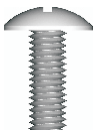


4

- Install Burner Housing to Smoker Chamber using three 1/4-20x1/2" bolts. Install all bolts hand tight, then tighten with a #2 Phillips Screwdriver (Not provided).
- NOTE: The venturi tube MUST face up (towards the door opening).

NOTE: The venturi tube MUST be installed as shown

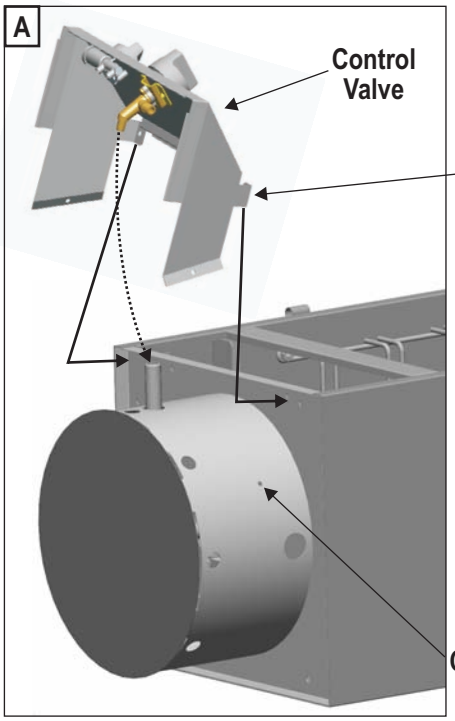


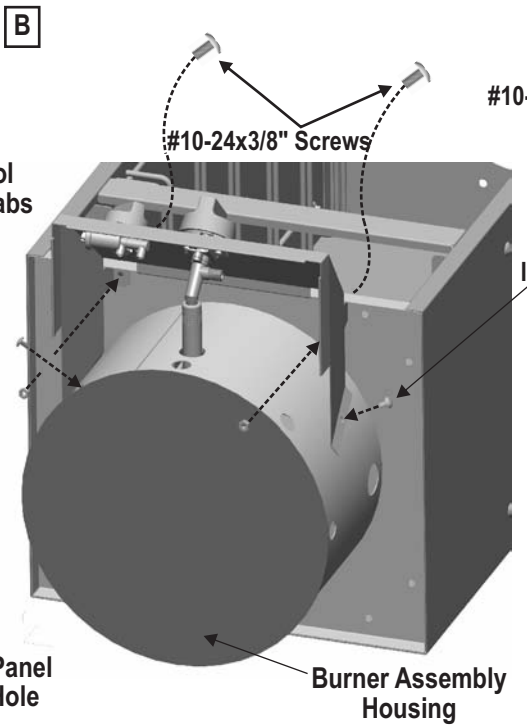


Qty: 3 #1/4-20x1/2" Combo Truss Head Bolt

5

- Place Control Panel Assembly onto Smoker Chamber by placing tabs under the front edge of the Smoker Chamber. The Control valve must engage the burner venturi tube as shown **A**.
- From the inside of the Smoker Chamber, Install 2 #10-24x3/8" screws through the smoker chamber and through the Control panel Tabs as shown. Thread 1 #10-24 Keps Nut onto each screw and tighten As shown **B.** Install 2 #10-24x3/8" screws through the control panel tabs and into the burner assembly housing. Thread 1 #10-24 Keps Nut onto each screw and tighten securely. **Shown B**

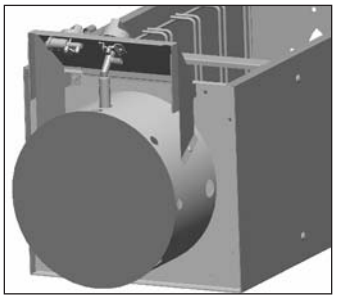




NOTE: Hose not shown for clarity

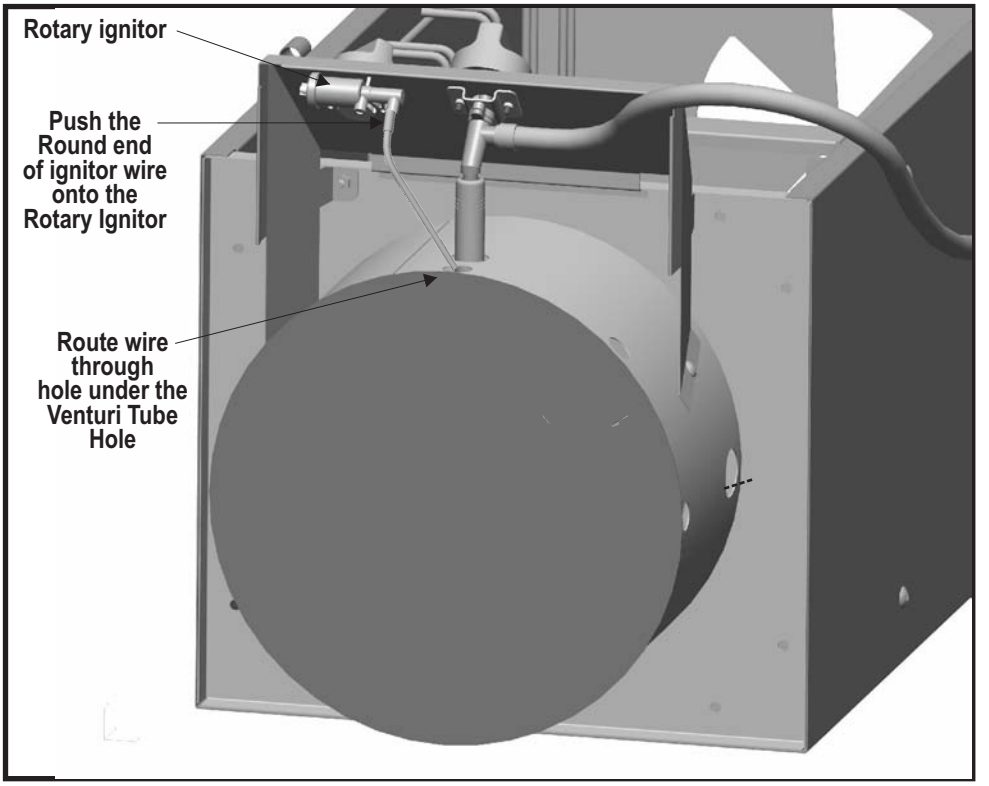
Install 1 #10-24x3/8" Screw per side

Control Panel Shown Installed



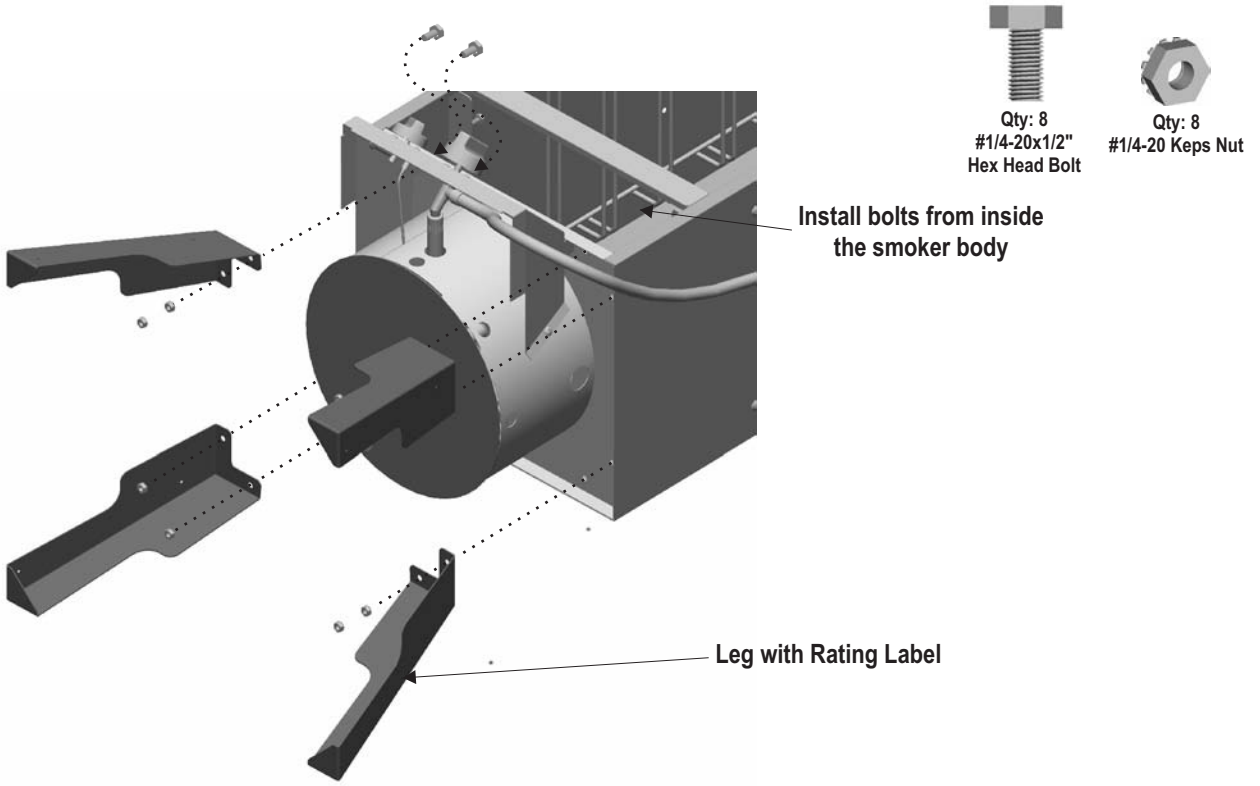
6

- Be sure the electrode wire exits the hole UNDER the venturi tube hole. DO NOT route the wire through the same hole as the burner venturi tube.
- Install Ignitor Wire by pushing the round connector onto the Ignitor as shown.



7

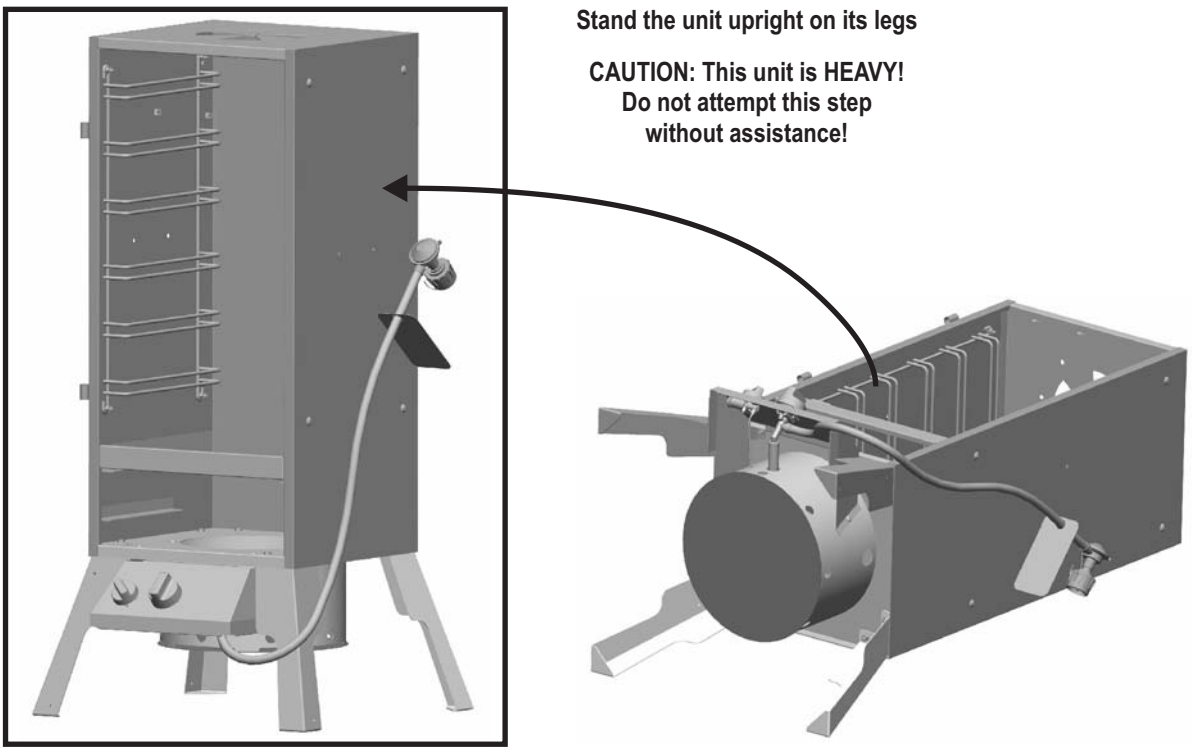
- Install legs by placing 2 - 1/4-20x1/2" Hex Head Bolt through the smoker body and through each leg as shown. Thread a 1/4-20 Keps nuts onto each bolt and tighten by hand. Using an adjustable wrench and 7/16" Combination wrench (Not Provided), tighten each nut and bolt securely.
- Install the leg with the rating label on the back side of the smoker body, as shown.



8

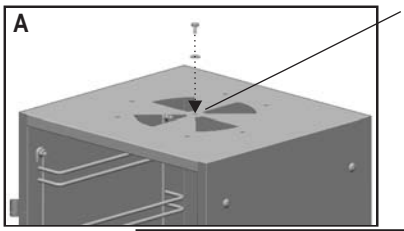
- With the assistance of a helper - stand the unit upright on its legs.

CAUTION: THIS UNIT IS HEAVY!



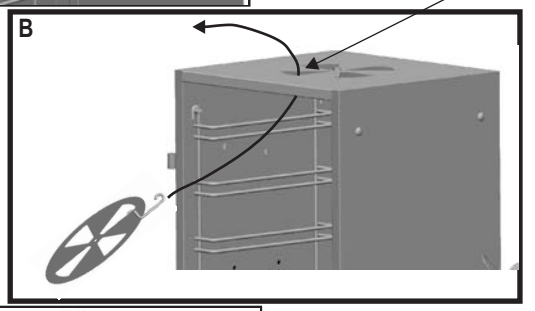
9

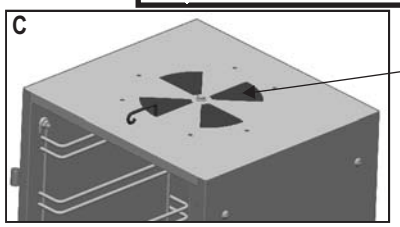
- Insert 1/4-20x1/2” Hex Head Bolt and flat washer through the top smoker body, in the center of the damper holes as shown.(A)
- Insert the damper as shown. (B)
- Place the 1/4” flat washer onto bolt and thread the 1/4-20 nut on to the bolt. Tighten the nut sufficiently to allow the damper to move. (B)
- Damper is shown properly installed in figure C.
- Install the side handles with 1/4-20X3/4” screws and 1/4-20 Keps nuts as shown (D)
- NOTE: If the handle springs are not installed on the handle rod, Install them per inset E.



Insert 1/4-20X1/2” bolt and flat washer into bolt hole

Insert damper handle through damper hole as shown





Damper shown installed

CAUTION: THE DAMPER HANDLE WILL BE HOT WHILE COOKING! WEAR AN INSULATED OVEN MITT WHEN MAKING ADJUSTMENTS!

Qty: 4 #1/4-20x3/4” Combo Truss Head screw

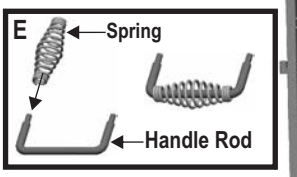
Qty: 1 #1/4-20x1/2" Hex Head Bolt

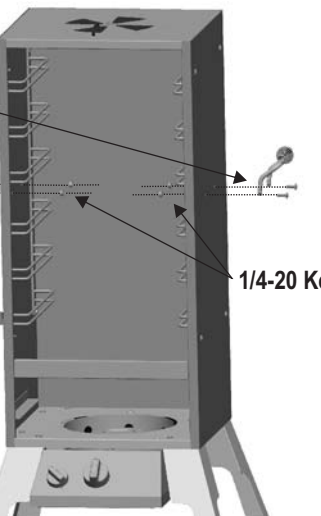
Qty: 2 #1/4 Flat Washer

Qty: 1 #1/4-20 Nut

Qty: 4 #1/4-20 Keps Nut

1/4-20X3/4” screws **D**



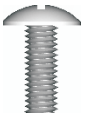


1/4-20 Keps nuts

Install Side Handles with 1/4-20X3/4” bolts and 1/4-20 Keps nuts as shown.

10

- Install Drawer Handle using 2 - 1/4-20x 3/4”screws and 2 1/4-20 Keps nuts. Tighten securely.
- Place the Water Pan onto the drawer rack as shown.
- Slide the Drawer, with Water Pan, into the Smoker body.

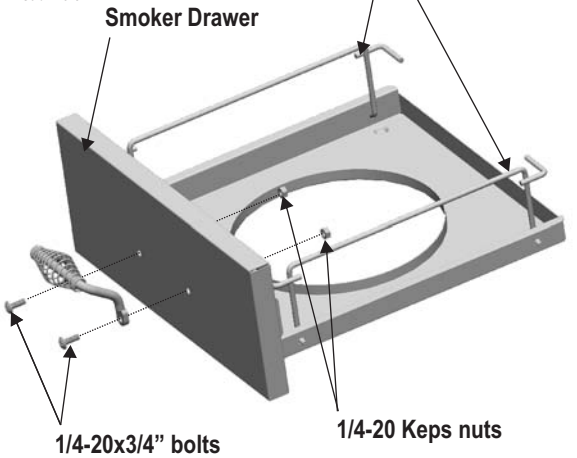


Qty: 2 #1/4-20x3/4" Combo Truss Head Bolt

Qty: 2 #1/4-20 Keps Nut

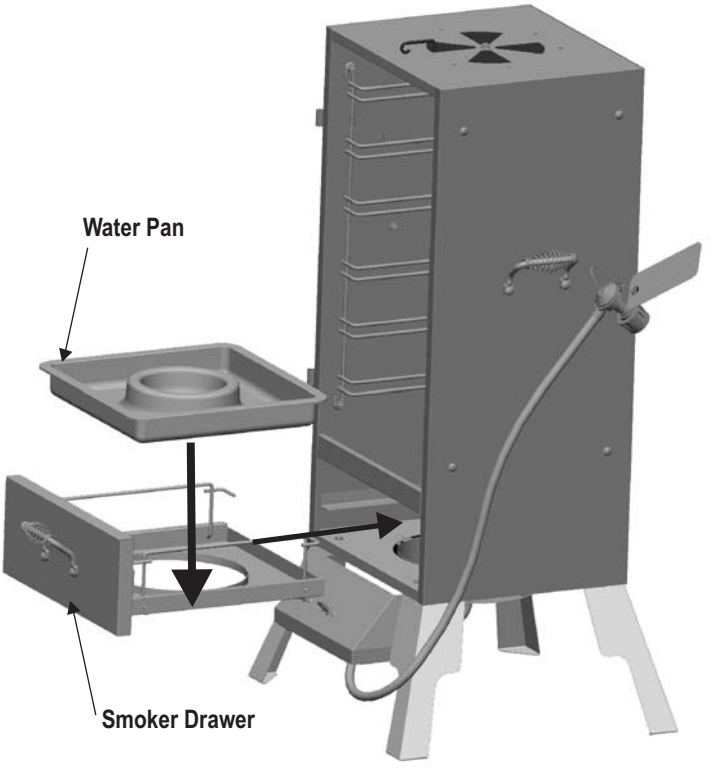
Water Pan Frame

Smoker Drawer



1/4-20x3/4” bolts

1/4-20 Keps nuts

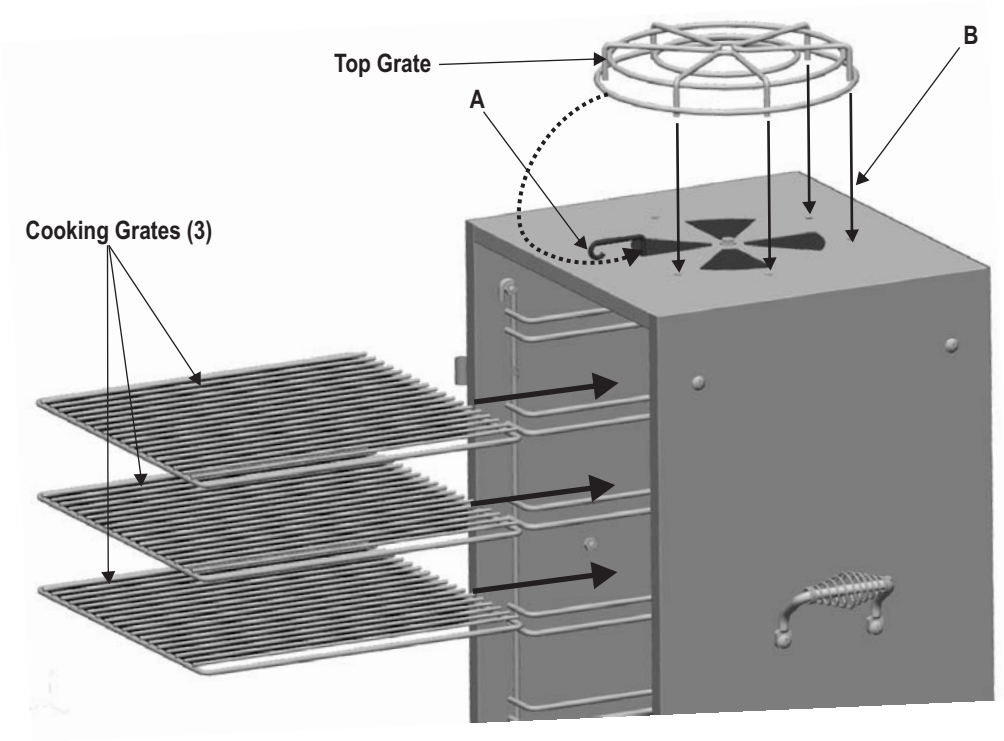


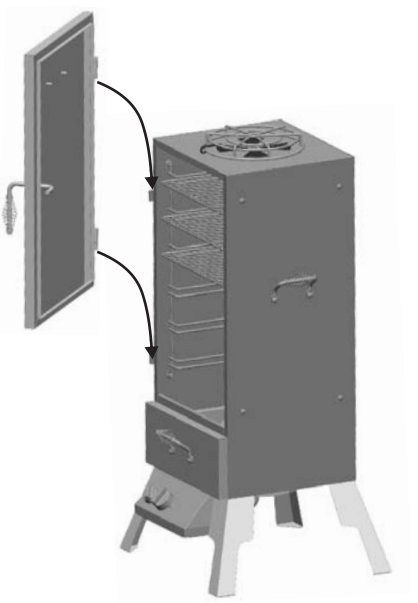
Water Pan

Smoker Drawer

11

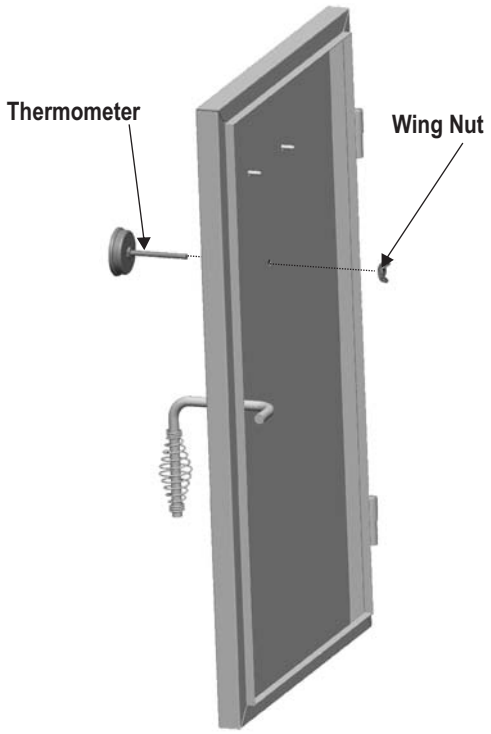
- Insert the 3 Cooking Grates into the smoker body.
- Slip the edge of the Top Grate under the Damper Handle (A), Then carefully align the grate so that the wire ends fit into the holes in the Smoker Body top.(B)
- Carefully place the door back onto the Smoker Body hinges.

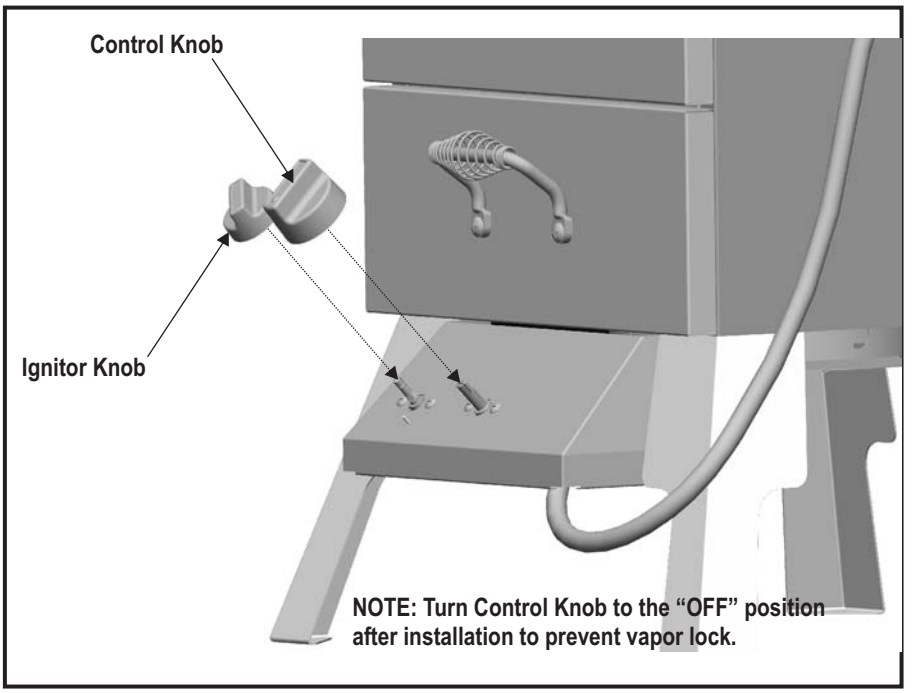




12

- Remove wingnut from Thermometer, insert Thermometer through the hole in the door from the front, reinstall the wingnut to the Thermometer.
- Press the Control Knob onto the Control Valve Shaft. Turn the Control Knob to the “Off” position.
- Press the Ignitor Knob onto the Ignitor Shaft.





EMERGENCIES: If a gas leak cannot be stopped, or a fire occurs due to gas leakage, call the fire department.

Emergencies	Possible Cause	Prevention/Solution
Gas leaking from cracked/cut/burned hose.	• Damaged hose.	• Turn off gas at LP cylinder or at source on natural gas systems. If hose is cut or cracked, replace valve/hose/regulator. See LP Cylinder Leak Test and Connecting Regulator to the LP Cylinder.
Gas leaking from LP cylinder.	• Mechanical failure due to rusting or mishandling.	• Replace LP cylinder.
Gas leaking from LP cylinder valve.	• Failure of cylinder valve from mishandling or mechanical failure.	• Turn off LP cylinder valve. Return LP cylinder to gas supplier.
Gas leaking between LP cylinder and regulator connection.	• Improper installation, connection not tight, failure of rubber seal.	• Turn off LP cylinder valve. Remove regulator from cylinder and visually inspect rubber seal for damage. See LP Cylinder Leak Test and Connecting Regulator to the LP Cylinder.
Fire coming through control panel.	• Fire in burner tube section of burner due to blockage.	• Turn off control knob and LP cylinder valve. Allow flames to die down. After fire is out and fryer is cold, remove burner and inspect for spider nests or rust. See Natural Hazard and Cleaning the Burner Assembly pages.
Grease fire or continuous excessive flames above cooking surface.	• Too much grease buildup in burner area.	• Turn off control knobs and LP cylinder valve. Allow flames to die down. After cooling, clean food particles and excess grease from inside fryer body, grease tray, and other surfaces.

Troubleshooting

Problem	Possible Cause	Prevention/Solution
Burner will not light using ignitor.	**GAS ISSUES:**	
	• Burner not engaged with control valve.	• Make sure valve is positioned inside of burner tube.
	• Obstruction in burner.	• Ensure burner tube is not obstructed with spider webs or other matter. See cleaning section of Use and Care.
	• No gas flow.	• Make sure LP cylinder is not empty. If LP cylinder is not empty, refer to “Sudden drop in gas flow.”
	• Vapor lock at coupling nut to LP cylinder.	• Turn off knob and disconnect coupling nut from LP cylinder. Reconnect and retry.
	• Coupling nut and LP cylinder valve not fully connected.	• Turn the coupling nut approximately one-half to three-quarters additional turn until solid stop. Tighten by hand only - do not use tools.
	ELECTRICAL ISSUES:	
	• Electrode cracked or broken; “sparks at crack.”	• Replace electrode.
	• Electrode tip not in proper position	• Tip of electrode should be pointing toward gas port opening on burner. The distance should be 1/8” to 1/4”. Adjust if necessary.
	• Wire and/or electrode covered with cooking residue.	• Clean wire and/or electrode with rubbing alcohol and clean swab.
	• Wire is loose or disconnected.	• Reconnect wire or replace electrode/wire assembly.
	• Wire is shorting (sparking) between ignitor and electrode.	• Replace ignitor wire/electrode assembly.

Troubleshooting (*continued*)

Problem	Possible Cause	Prevention/Solution
Burner will not light using ignitor.	• Rotary knob rotates without clicking. • Sparking between ignitor and electrode.	• Replace knob. • Inspect wire insulation and proper connection. Replace wire if insulation is broken.
Burner will not match light.	• See **"GAS ISSUES:"** on previous page. • Match will not reach. • Improper method of match-lighting.	• Use long-stem match (fireplace match). • See "Match-Lighting" section of Use and Care.
Sudden drop in gas flow or low flame.	• Out of gas. • Excess flow valve tripped. • Vapor lock at coupling nut/LP cylinder connection.	• Check for gas in LP cylinder. • Turn off knob, wait 30 seconds and light fryer. If flames are still low, turn off knob and LP cylinder valve. Disconnect regulator. Reconnect regulator and leak-test. Turn on LP cylinder valve, wait 30 seconds and then light fryer. • Turn off knob and LP cylinder valve. Disconnect coupling nut from cylinder. Reconnect and retry.
Flames blow out.	• Low on LP gas. • Excess flow valve tripped.	• Refill LP cylinder. • Refer to "Sudden drop in gas flow" above.
Flare-up.	• Grease buildup. • Excessive fat in meat. • Excessive cooking temperature.	• Clean burner and inside of fryer body. • Trim fat from meat before grilling. • Adjust (lower) temperature accordingly.
Persistent grease fire.	• Grease trapped by food buildup around burner system.	• Turn knob to OFF. Turn gas off at LP cylinder. Let fire burn out. After fryer cools, remove and clean all parts.
Flashback... (fire in burner tube).	• Burner and/or burner tube is blocked.	• Turn knob to OFF. Clean burner and/or burner tube. See burner cleaning section of Use and Care.
Unable to fill LP cylinder.	• Some dealers have older fill nozzles with worn threads.	• The worn nozzles don't have enough "bite" to engage the valve. Try a second LP dealer.
Cooking slower than expected	• High wind conditions • Vapor Lock • Valve not properly aligned to burner	• Relocate cooker to a less windy area • Turn off knob and disconnect coupling nut from LP cylinder. Reconnect and retry. • Loosen control panel and valve. Be sure valve is centered top to bottom and left to right in burner tube. Tighten all components once proper alignment is achieved.

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Protected under one or more of the following U.S. Patents: 4,598,692; 4,624,240; 4,747,391; 4,747,391; 4,817,583; 4,924,846; 4,989,579; 5,003,960; 5,076,256; 5,076,257; 5,090,398; 5,109,834; 5,224,676; 5,277,106; 5,421,319; 5,441,226; 5,452,707; 5,458,309; 5,566,606; 5,566,606; 5,579,755; 5,582,094; 5,613,486; 5,649,475; 5,706,797; 5,711,663; 5,765,543; 5,931,149; 5,996,573; 6,095,132; 6,135,104; 6,173,644B1; 6,279,566; 6,397,731; 6,418,923; 6,439,222; 6,523,461; D282,619; D339,714; D341,292; D343,337; D358,059; D361,466; D364,535; D372,637; D373,701; D377,735; D383,035; D397,910; D405,643; D405,643; D406,005; D406,009; D413,043; D413,229; D413,229; D414,982; D415,388; D416,164; D416,441; D416,441; D417,587; D422,516; D423,274; D423,876; D428,303; D435,396; D436,004; D438,059; D438,060; D438,427; D439,110; D442,505; D443,179; D443,354; D447,384; D447,385; D447,909; D448,610; D448,614; D448,615; D448,616; D448,975; D449,492; D451,759; D456,202S; D460,313, D461,359 and D504,048. Canada: 87743; 87744; 92607; 92608 and 1,316,424. Other Patents Pending. Assembly instructions © 2007.

LIMITED WARRANTY

Manufacturer warrants to the original consumer-purchaser only that this product shall be free from defects in workmanship and materials after correct assembly and under normal and reasonable home use for the periods indicated below beginning on the date of purchase.

The manufacturer reserves the right to require that defective parts be returned, postage and or freight pre-paid, by the consumer, for review and examination.

90 DAYS LIMITED warranty on all parts against manufacturing and materials defects

Does not cover cosmetic issues like surface corrosion, scratches and rust

Does not cover chipping, scratching or surface damage to painted or stainless steel surfaces

Upon consumer supplying proof of purchase as provided herein, Manufacturer will repair or replace the parts listed below which are proven defective during the applicable warranty period. Parts required to complete such repair or replacement shall be free of charge to you except for shipping costs. **The original consumer-purchaser will be responsible for all shipping charges of parts replaced under the terms of this limited warranty.**

This limited warranty is applicable in the United States and Canada only, is only available to the original owner of the product and is not transferable. Manufacturer requires reasonable proof of your date of purchase. Therefore, you should retain your sales slip or invoice and register your new product immediately. Defective or missing parts subject to this limited warranty will not be replaced without registration or proof of purchase. Register online at http://www.charbroil.com or complete and return via mail the Product Registration Card located on the last page of the Use & Care manual included with this product and retain your sales receipt for proof of purchase.

This limited warranty applies to the functionality of the product ONLY and does not cover cosmetic issues such as scratches, dents, corrosion or discoloring by heat, abrasive and chemical cleaners or any tools used in the assembly or installation of the appliance, surface rust, or the discoloration of stainless steel surfaces.

This limited warranty will not reimburse you for the cost of any inconvenience, food, personal injury or property damage.

If an original replacement part is not available, a comparable replacement part will be sent. You will be responsible for all shipping charges of parts replaced under the terms of this limited warranty.

ITEMS MANUFACTURER WILL NOT PAY FOR:

1. Service calls to your home.
2. Repairs when your product is used for other than normal, single-family household or residential use.
3. Damage resulting from accident, alteration, misuse, abuse, fire, flood, acts of God, improper installation, installation not in accordance with electrical or plumbing codes, or use of products not approved by the manufacturer.
4. Any food loss due to product failures.
5. Replacement parts or repair labor costs for units operated outside the United States or Canada.
6. Pickup and delivery of your product.
7. Repairs to parts or systems resulting from unauthorized modifications made to the product.
8. The removal and/or reinstallation of your product.
9. Shipping cost, standard or expedited, for warranty and replacement parts.

DISCLAIMER OF IMPLIED WARRANTIES; LIMITATION OF REMEDIES

Repair or replacement of defect parts is your exclusive remedy under the terms of this limited warranty. Manufacturer will not be responsible for any consequential or incidental damages arising from the breach of either this limited warranty or any applicable warranty, or for failure or damage resulting from acts of God, improper care and maintenance, grease fire, accident, alteration, replacement of parts by anyone other than Manufacturer, misuse, transportation, commercial use, abuse, hostile environments (inclement weather, acts of nature, animal tampering), improper installation or installation not in accordance with local codes or printed manufacturer instructions.

THIS LIMITED WARRANTY IS THE SOLE EXPRESS WARRANTY GIVEN BY THE MANUFACTURER. NO PRODUCT PERFORMANCE SPECIFICATION OR DESCRIPTION WHEREVER APPEARING IS WARRANTED BY MANUFACTURER EXCEPT TO THE EXTENT SET FORTH IN THIS LIMITED WARRANTY. ANY IMPLIED WARRANTY PROTECTION ARISING UNDER THE LAWS OF ANY STATE, INCLUDING IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, IS HEREBY LIMITED IN DURATION TO THE DURATION OF THIS LIMITED WARRANTY.

Neither dealers nor the retail establishment selling this product has any authority to make any additional warranties or to promise remedies in addition to or inconsistent with those stated above.

Manufacturer's maximum liability, in any event, shall not exceed the documented purchase price of the product paid by the original consumer.

This warranty only applies to units purchased from an authorized retailer and or re-seller.

NOTE: Some states do not allow an exclusion or limitation of incidental or consequential damages, so some of the above limitations or exclusions may not apply to you. This limited warranty gives you specific legal rights as set for herein. You may also have other rights which vary from state to state. In the state of California only, if refinishing or replacement of the product is not commercially practicable, the retailer selling this product or the Manufacturer will refund the purchase price paid for the product, less the amount directly attributable to use by the original consumer-purchaser prior to discovery of the nonconformity. In addition, in the state of California only, you may take the product to the retail establishment selling this product in order to obtain performance under this limited warranty.

If you wish to obtain performance of any obligation under this limited warranty, you should write to:

Char-Broil Consumer Relations
P. O. Box 1240
Columbus, GA 31902-1240

Consumer returns will not be accepted unless a valid Return Authorization is first acquired by calling 1-800-241-7548 and then clearly marked on the outside of the package and the package is shipped freight/postage pre-paid to the address above.

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STOP

Should you encounter a problem with our product
CALL US FIRST
Do not return this product to the store.
WE CAN HELP
GRILL SERVICE CENTER
1-800-241-7548
HOURS 8AM-6PM EST Mon-Fri

Please ensure your warranty registration is complete.

Cb600x™ Safety Checklist

- ☐ Read and understand owners manual.
- ☐ Never overfill LP cylinder. Overfilled cylinders may cause freeze-up of regulator.
- ☐ Check tubes for spider webs. Ensure valves are correctly installed in burner tubes.
- ☐ Always ensure control knobs are in OFF position and regulator is attached to tank BEFORE opening tank valve to avoid low flames.
- ☐ Perform leak test regularly.

Thank You for Your Purchase!

Char-Broil

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